

TRANSFORMING JOB ROLES WITH GENERATIVE AI: EVIDENCE FROM JOB POSTINGS IN THE GEORGIAN LABOR MARKET

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Abstract: *This paper examines how generative artificial intelligence (GenAI) is reshaping business roles in the Georgian labor market. Based on a dataset of job postings collected from major hiring platforms, the study applies a five-type transformation typology: role expansion, enrichment, redesign, merging, and new role creation to identify patterns of change. The findings show that GenAI is primarily integrated into existing roles while also contributing to the emergence of new AI-focused positions. More disruptive transformations, such as role redesign and merging, remain less widespread, indicating that deeper structural changes are still developing. Overall, the results suggest that the Georgian labor market is in an early but active phase of AI adoption, where augmentation dominates but institutionalization is increasing within technical fields. The study provides structured empirical evidence on GenAI-driven role transformation in Georgia and offers implications for workforce policy, education systems, and employer strategies.*

Keywords: *generative AI, labor market, role transformation, Georgia, workforce, occupational change.*

1 Introduction

The emergence of generative AI (GenAI) tools including large language models, code-generation platforms and multimodal systems accelerating changes in how job roles are structured globally. As Georgian firms in sectors such as marketing, IT services, communications, and media begin integrating GenAI into their operations, the impact extends well beyond task automation. GenAI is prompting organizations to reimagine job responsibilities, redistribute tasks between humans and AI systems and in some cases create entirely new occupational categories. Yet this transformation is occurring with limited institutional visibility: job postings and role descriptions in Georgia now contain observable signals of this shift, but they have not been systematically studied.

Understanding how roles are changing in the Georgian labor market is critical for aligning higher education, vocational training, and workforce policy with the rapidly evolving demands of a GenAI-influenced economy. Georgia occupies a distinctive position among emerging economies: it has a growing technology services sector, an internationally oriented ICT outsourcing industry, and a rapidly digitalizing business environment, yet it lacks the deep AI infrastructure and large-firm dominance that characterize the economies where most existing evidence has been collected. The patterns of GenAI-induced role change documented in the United States, Northern Europe, or China cannot be straightforwardly assumed to hold in Georgia they must be empirically investigated.

This paper addresses that gap. Drawing on job postings from the Georgian labor market collected in January, 2025, we apply a five-type transformation typology to classify how GenAI is being integrated into actual job requirements. The typology is grounded in recent international literature on AI and work and enables systematic comparison of transformation patterns across occupational categories and industry sectors.

2 Literature Review

The literature on generative AI and the future of work has grown dramatically since the public release of large language models in late 2022. What the empirical record reveals is that GenAI transforms work through at least five distinct patterns not a single-directional process of automation or augmentation, each operating through a different mechanism and in a different organizational context. This review traces each pattern as documented in real labor markets and job postings.

2.1 Role Expansion

Role expansion is the most pervasive entry point through which GenAI enters existing labor market structures. Existing job titles remain unchanged while task content expands to include AI-assisted content drafting, automated reporting, and routine integration of large language models into professional output. Ahmadi et al. (2023), analyzing ChatGPT-related U.S. job advertisements from mid-2023, identify general familiarity and creative content generation as the most widely distributed skill clusters both embedded within existing titles rather than new AI-designated positions. Acemoglu et al. (2022), examining the near-universe of U.S. online vacancies from 2010 to 2018, show that AI-exposed establishments broaden AI-related task demands within existing postings while reducing non-AI vacancy volume. Dillon et al. (2025) find in a field experiment across 66 firms and 7,137 knowledge workers that GenAI access reduced email time by two hours per week without any detectable shift in the formal composition of task portfolios indicating productivity gains are reabsorbed as additional capacity within the same role. Hui et al. (2023) add a distributional qualification: even highly rated freelancers in AI-exposed categories experienced employment and earnings declines post-ChatGPT, suggesting firm-level expansion can coexist with individual-level displacement.

2.2 Role Enrichment

A more consequential pattern emerges when managing GenAI tools becomes a substantive professional responsibility. In enriched roles, workers are governors of AI designing prompts, evaluating output reliability, and optimizing AI integration into complex workflows. Peng et al. (2023), in a controlled experiment with professional developers using GitHub Copilot, document a 55.8% task completion advantage for AI-assisted workers. Hoffmann et al. (2025), studying open-source software developers, find Copilot access shifts work toward core coding and away from project management, while increasing exploratory over exploitative work styles. Gulati et al. (2025), analyzing 8.4 million postings from 596 U.S. firms, find GenAI roles demand 43.7% higher cognitive skill intensity, with a 4.5% post-ChatGPT decline in social skill demands. Bluemelhuber and Langer (2026), processing 22,352 GenAI postings on Stepstone, identify 32 distinct KSA clusters, finding GenAI roles layer new AI-specific competencies atop established professional foundations.

2.3 Role Redesign

Role redesign describes positions where GenAI substitutes for the generative core of a role, redirecting human effort toward supervision, verification, and correction of machine-produced outputs. Acemoglu (2024) establishes the economic logic: AI substitutes first where the ratio of AI to human task-specific productivity is highest typically content generation and structured text production. Capraro et al. (2024) identify communication, legal services, and customer support as the sectors where redesign is most visible. Eriksson and Nordin (2025), analyzing Swedish software engineering job advertisements, document that as AI code generation tools become standard, postings increasingly emphasize code review and output validation over independent authorship. Rahouli (2025) finds a perception-performance gap:

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workers report higher confidence using GenAI yet show no measurable improvement in independent analytical reasoning, suggesting redesign can progressively hollow out underlying cognitive capabilities.

2.4 Role Merging

Role merging occurs when GenAI enables a single worker to produce what previously required multiple specialists. Dillon et al. (2025) find that GenAI time savings are absorbed into broadened task coverage within the same role, implying firms extract cross-functional value in ways that effectively merge distinct task domains. De Cremer, Morini Bianzino and Falk (2023) illustrate this in creative industries: image generators and text tools enable individuals to simultaneously cover copywriting, visual production, and content strategy. Nakash and Peretz (2025), analyzing LinkedIn job postings, identify an explicit shift from unifunctional to multifunctional role expectations and a T-shaped professional model. Salari et al. (2025) confirm merging is most prevalent in digital-first and startup environments where multi-capability AI platform adoption is most rapid.

2.5 New Role Creation

New role creation represents the emergence of entirely novel occupational categories with no pre-AI equivalent positions such as Prompt Engineer, AI Content Strategist, GenAI Consultant, and AI Ethics Officer. Ahmadi et al. (2023) identify product development and prompt engineering skill clusters concentrated in newly titled positions with no close predecessor in pre-2022 job market data. Gulati et al. (2025) show GenAI-proficiency roles have grown substantially post-ChatGPT and exhibit a structurally distinct skill profile constituting a genuinely new occupational category. Chen et al. (2025), studying the Chinese labor market, find a positive correlation between occupational LLM exposure scores and vacancy growth rates consistent with expanding professional demand driven by the AI capability frontier. Nakash and Peretz (2025) identify Quality and Compliance and Career Development as newly institutionalized AI job categories crystallized only in the GenAI era.

2.6 Transformation Typology

Drawing on the five streams of evidence reviewed above, Table 1 presents the formal typology of GenAI-induced role transformations applied in this study, specifying the core description, identification criteria, and supporting empirical literature for each type. This typology provides the coding framework applied to the Georgian job posting sample.

Table 1. *Typology of GenAI-Induced Role Transformations*

Type	Description	Identification Criteria	Supporting Literature
1. Role Expansion	Traditional job title unchanged; GenAI tasks added to existing responsibilities.	Title unchanged (e.g., Manager, Analyst). Description includes tasks involving specific GenAI tools as part of regular work.	Ahmadi et al. (2023); Acemoglu et al. (2022); Dillon et al. (2025); Salari et al. (2025)
2. Role Enrichment	Role deepened to require strategic or technical GenAI mastery: prompt engineering, workflow optimisation, output governance.	Mentions advanced GenAI use: design prompts, evaluate AI output, develop workflows. Common in senior-level listings.	Peng et al. (2023); Hoffmann et al. (2025); Gulati et al. (2025); Bluemelhuber & Langer (2026)

Type	Description	Identification Criteria	Supporting Literature
3. Role Redesign	GenAI replaces part of the role's original tasks; worker focus shifts to supervision, review, or QA.	Job description centers on editing or validating AI-generated outputs. Oversight and QA language is prominent.	Acemoglu (2024); Gries & Naude (2022); Tona et al. (2025); Eriksson & Nordin (2025)
4. Role Merging	Single role combines tasks from formerly distinct domains, made viable by GenAI support.	One job includes tasks from two or more distinct domains. Multiple GenAI tools referenced. Common in SMEs.	Dillon et al. (2025); Hoffmann et al. (2025); De Cremer et al. (2023); Nakash & Peretz (2025)
5. New Role Creation	Entirely new GenAI-focused occupations emerge with distinct titles and no pre-AI equivalent.	Title includes AI Specialist, Prompt Engineer, GenAI Consultant. Role centered on GenAI use or development.	Ahmadi et al. (2023); Gulati et al. (2025); Bluemelhuber & Langer (2026); Chen et al. (2025)

Note. Identification criteria are the operational coding rules applied in this study.

3 Methodology

This study adopts a qualitative content analysis design applied to a purposive sample of job postings from the Georgian labor market. The methodological foundation is the five-type transformation typology developed in the literature review. The design is cross-sectional, capturing a snapshot of the market at a specific point in time, with a second-round data collection planned for a subsequent period to enable longitudinal comparison.

The empirical phase involved systematic collection of all publicly available job postings published during a January, 2026 on LinkedIn, Jobs.ge, HR.ge and Facebook job boards the major hiring platforms in Georgia. From this list, only advertisements explicitly mentioning GenAI-related tasks, tools, or skills were selected, including references to ChatGPT, Gemini, Copilot, Midjourney, LLMs, prompt engineering and analogous technologies in both English and Georgian.

Before transformation type coding was applied, each posting underwent an applicability assessment. A posting was classified as Applicable if GenAI constituted an active task requirement (assigned responsibility, formal skill requirement, or title indicator) rather than a background mention, passive awareness clause, or nice-to-have qualifier. This yielded 88 applicable postings retained for full coding and rest were designated Not Applicable and excluded.

Each applicable posting was coded against the five-type typology using manual review to add coding. Each posting was further classified using ISCO-08 occupational codes (four-digit unit group level) and NACE Rev.2 sector codes.

Table 2. *Coding Criteria for GenAI Transformation Types*

Type	Description	Identification Criteria	Characteristic Indicators
1. Role Expansion	Title unchanged; GenAI tasks added as productivity add-on.	Title unchanged; GenAI tools in responsibilities or required skills, not only company overview.	'Use ChatGPT to write reports'; 'AI-assisted content generation'; tool names (Midjourney, Copilot) in required skills.

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Type	Description	Identification Criteria	Characteristic Indicators
2. Role Enrichment	Role deepened to require AI governance, not just AI use.	Advanced GenAI use: prompt engineering, AI workflow design, LLM integration. Core requirement, not supplementary.	'Design and optimize prompts'; 'develop GenAI workflows'; 'evaluate AI outputs'; 'LLM integration expertise required'.
3. Role Redesign	GenAI assumes generative tasks; human shifts to oversight and QA.	Description centers on editing, reviewing, or validating AI-generated outputs rather than creating from scratch.	'Review and edit AI drafts'; 'validate generated summaries'; 'QA AI outputs'; 'test model responses'.
4. Role Merging	Single role covers formerly distinct functional domains via GenAI.	Tasks from two or more distinct domains in one posting. Multiple GenAI tools from different domains referenced.	'Create content, visuals, and data reports with AI support'; multiple tool names across domains.
5. New Role Creation	Entirely novel GenAI-centric occupation with no close pre-AI equivalent.	Title explicitly signals GenAI function. Responsibilities center on designing, developing, or governing AI systems.	Title: AI Engineer, Prompt Engineer, MLOps Engineer, AI Ethics Specialist, GenAI Consultant.

Note. Where a posting exhibits features of more than one type, the dominant type is assigned based on the primary function and task focus of the role.

Several limitations apply. The sample is concentrated in the ICT sector, and internationally oriented software firms account for a significant share of postings, which may inflate New Role Creation and Role Enrichment relative to the broader Georgian economy. The cross-sectional design captures a snapshot of a rapidly evolving market. Job postings reflect demand signals rather than actual employment outcomes.

4 Results

4.1 Distribution of Transformation Types

Table 3 presents the distribution across the 88 applicable postings. Role Expansion is the most prevalent type by a substantial margin ($n = 48$, 54.5%): traditional occupational roles are being augmented by AI tool requirements without fundamental recharacterization of occupational identity. New Role Creation is the second most prevalent type ($n = 19$, 21.6%), concentrated predominantly in AI and ML engineering roles. Role Enrichment ($n = 13$, 14.8%) captures roles where GenAI competencies have become core strategic requirements. Role Redesign ($n = 5$, 5.7%) and Role Merging ($n = 3$, 3.4%) are the least frequent types, confirming that deep task displacement and cross-domain consolidation remain comparatively rare in the current Georgian posting landscape.

Table 3. *Distribution of GenAI Transformation Types ($n = 88$ applicable postings)*

Transformation Type	n	% of Applicable	Primary Occupational Domain
Role Expansion	48	54.5%	Marketing, content creation, design, software dev
Role Enrichment	13	14.8%	ICT professionals, data science

Transformation Type	n	% of Applicable	Primary Occupational Domain
Role Redesign	5	5.7%	QA, testing, data operations
Role Merging	3	3.4%	Creative/media, content writing
New Role Creation	19	21.6%	AI & ML engineering, data science, consulting
Total	88	100.0%	—

Note. Percentages are of the 88 applicable postings.

4.2 Occupational Analysis (ISCO-08)

Table 4 cross-tabulates transformation types against ISCO-08 major groups across all 88 applicable postings. ISCO Major Group 2 (Professionals) accounts for 72 postings (81.8%), the dominant group by a substantial margin. ISCO Major Group 1 (Managers) accounts for 14 postings (15.9%), with Role Expansion the most frequent type (9 postings) among managers, followed by New Role Creation (3) covering AI director and team lead positions, Role Enrichment (1), and Role Redesign (1). ISCO Major Group 3 (Technicians) accounts for only 2 postings (2.3%), both classified as Role Redesign an audio transcriptionist and a QA tester whose tasks are structured around validating AI-generated outputs.

Table 4. Transformation Type by ISCO-08 Major Occupational Group (n = 88)

ISCO-08 Major Group	Expansion	Enrichment	Redesign	Merging	New Role	Total
Managers (ISCO 1)	9	1	1	0	3	14
Professionals (ISCO 2)	39	12	2	3	16	72
Technicians (ISCO 3)	0	0	2	0	0	2
Total	48	13	5	3	19	88

Note. All 88 applicable postings have ISCO-08 codes assigned. Exp. = Expansion; Enr. = Enrichment; Red. = Redesign; Mrg. = Merging; New = New Role Creation.

At the four-digit ISCO unit group level (Table 5), ISCO 2519 (Software and Applications Developers NEC) is the largest group across all 88 postings (n = 27, 30.7%), with Role Expansion (12) the most frequent type, followed by New Role Creation (9) and Role Enrichment (5). ISCO 2512 (Software Developers, n = 12, 13.6%) is the second largest, with Expansion (6), Enrichment (3), Redesign (1), and New Role Creation (2). ISCO 2431 (Advertising and Marketing Professionals, n = 10, 11.4%) is primarily Expansion (5) with New Role Creation (3) covering Technical AI Consultant and AI specialist postings. ISCO 1330 (ICT Services Managers, n = 10, 11.4%) is predominantly Expansion (6), with 2 New Role Creation cases (ML/AI Engineering Team Lead; AI & IT Director). ISCO 2166 (Graphic and Multimedia Designers, n = 8, 9.1%) spans Expansion (5), Merging (1), Enrichment (1), and New Role Creation (1), reflecting the differentiated transformation pattern in creative occupations. The two ISCO Major Group 3 postings are ISCO 3514 (Onboarding QA Tester) and ISCO 3319 (Audio Transcriptionist), both Role Redesign, representing the clearest cases of AI-driven task displacement in the sample.

Table 5. ISCO-08 Unit Groups in GenAI-Affected Roles, by Transformation Type (n = 88)

ISCO	Occupational Group	n	%	Exp.	Enr.	Red.	Mrg.	New
2519	Software & App. Developers NEC	27	30.7%	12	5	1	0	9
2512	Software Developers	12	13.6%	6	3	1	0	2
2431	Advertising & Marketing Profs.	10	11.4%	5	1	0	1	3

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ISCO	Occupational Group	n	%	Exp.	Enr.	Red.	Mrg.	New
1330	ICT Services Managers	10	11.4%	6	1	1	0	2
2166	Graphic & Multimedia Designers	8	9.1%	5	1	0	1	1
2522	Systems Administrators	4	4.5%	3	1	0	0	0
2422	Management & Org. Analysts	4	4.5%	3	1	0	0	0
2641	Authors & Related Writers	4	4.5%	2	0	0	1	1
1219	Business Services Managers NEC	4	4.5%	3	0	0	0	1
3514	Web & Multimedia Developers	1	1.1%	0	0	1	0	0
3319	Admin. & Secretarial Workers NEC	1	1.1%	0	0	1	0	0
2432	Public Relations Professionals	1	1.1%	1	0	0	0	0
2611	Lawyers	1	1.1%	1	0	0	0	0
2342	Primary School Teachers	1	1.1%	1	0	0	0	0

Note. All 88 applicable postings have ISCO codes. Percentages are of n = 88. Exp. = Expansion; Enr. = Enrichment; Red. = Redesign; Mrg. = Merging; New = New Role Creation. ISCO 3319 = Administrative & Secretarial Workers NEC (Audio Transcriptionist).

4.3 Sectoral Analysis (NACE Rev.2)

Table 6 presents transformation types by NACE Rev.2 sub-sector across all 88 postings. The Information and Communication sector (NACE J) accounts for 68 postings (77.3%), heavily dominated by J62.01 (Custom software programming, n = 43, 48.9%), which concentrates Role Expansion (26), New Role Creation (9), and Role Enrichment (7). NACE J62.09 (Other IT and computer services, n = 13) has 5 New Role Creation and 2 Redesign cases the highest Redesign share of any sub-sector. The Professional, Scientific and Technical Activities sector (NACE M) accounts for 13 postings (14.8%): M70.22 (Management consultancy, n = 6) includes 2 New Role Creation cases (Technical AI Consultant roles), and M73.11 (Advertising agencies, n = 6) includes 1 Merging case (AI Content Creator) and 1 New Role Creation. The remaining 7 postings span diverse sectors including artistic creation (R90.03, n = 2, both Role Merging music content production using Suno and Udio), construction, real estate, event organization, legal activities, and education.

Table 6. Transformation Types by NACE Rev.2 Sub-sector (n = 88)

NACE Sector	Sub-sector	Expansion	Enrichment	Redesign	Merging	New Role
J – Information & Communication (n=68, 77.3%)	J62.01 Custom software programming (n=43)	26	7	1	0	9
	J62.09 Other IT & computer services (n=13)	4	2	2	0	5
	J62.02 Computer consultancy (n=9)	5	2	2	0	0
	J61.20 Wireless telecom (n=2)	1	0	0	0	1
	J60.10 Radio/media broadcasting (n=1)	1	0	0	0	0
M – Professional, Scientific &	M70.22 Business & management consultancy (n=6)	3	1	0	0	2

NACE Sector	Sub-sector	Expansion	Enrichment	Redesign	Merging	New Role
Technical (n=13, 14.8%)						
	M73.11 Advertising agencies (n=6)	3	1	0	1	1
	M69.10 Legal activities (n=1)	1	0	0	0	0
Other Sectors (n=7, 8.0%)	R90.03 Artistic creation – music/media (n=2)	0	0	0	2	0
	F41.20 Construction (n=2)	2	0	0	0	0
	L68.10 Real estate (n=1)	1	0	0	0	0
	N82.30 Event organization (n=1)	0	0	0	0	1
	P85.59 Other education (n=1)	1	0	0	0	0
Total	—	48	13	5	3	19

Note. All 88 applicable postings have NACE codes. NACE J = Information and Communication (77.3%); M = Professional, Scientific and Technical Activities (14.8%); Other sectors = 8.0%.

4.4 Broad Occupational Groups and Illustrative Job Titles

Table 7 synthesizes the occupational analysis by presenting broad occupational groups author-defined aggregations of ISCO-08 unit groups alongside dominant transformation types, secondary types, and illustrative job titles drawn from the Georgian posting sample. All 88 postings are now assigned to a group.

Table 7. *GenAI Transformation Types by Broad Occupational Group with Illustrative Job Titles (n = 88)*

Occupational Group	ISCO-08 Codes	n	Dominant Type	Secondary Types	Illustrative Job Titles
AI & ML Engineering	2519 (part)	19	New Role Creation	Expansion, Enrichment	Senior AI Engineer; Lead AI Python Engineer; Senior MLOps Engineer; GenAI Ops Engineer; AI Solution Architect; AI/ML Engineer Lead; AI Specialist
Software & Systems Engineering	2512, 2519 (part), 2522	23	Role Expansion	Enrichment	Cloud Native .NET Engineer (AI Integration); Senior iOS/Android Developer; Senior .NET Developer; Solution Architect – MS Copilot; Senior Software Engineer (Go, LLM); Associate Software Engineer
Data Science & Analytics	2519 (part)	8	New Role Creation / Enrichment	Expansion	Data Science Team Lead; Senior Data Scientist; Lead Data Scientist; Data Solution Architect / AI Architect; Senior Infrastructure Automation Engineer
QA, Testing & Data Operations	3514, 3319	2	Role Redesign	—	Onboarding QA Tester; Audio Transcriptionist

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Occupational Group	ISCO-08 Codes	n	Dominant Type	Secondary Types	Illustrative Job Titles
Marketing & Advertising	2431, 2432	11	Role Expansion	New Role Creation, Merging	PR Specialist (AEO focus); Digital PR & AEO Specialist; Technical AI Consultant; Growth Marketing Specialist; AI Advertising Intern; Digital Marketing & Product Coordinator
Creative Design & Media	2166, 2641	12	Role Expansion	Merging, Enrichment	Graphic Designer (Marketing Content); UI/UX Designer; Marketing Video Artist; AI Content Creator; AI Content Manager; Music Content Author (Suno/Udio); Video Editor; Lead AI Python Engineer
Management & Consulting	1330, 1219, 2422	22	Role Expansion	New Role Creation, Enrichment	AI & IT Director; ML/AI Engineering Team Lead; AWS Technology Leader; Client Engagement Leader; Senior Delivery Manager; Sr. Manager/Director Cloud Consulting; Operations Director; Business Monitoring Manager
Education, Legal & Other	2342, 2611	4	Role Expansion	—	Programming & Robotics Trainer; Corporate Lawyer (AI tools); IT Specialist; Project Manager

Note. Dominant Type indicates the most frequent transformation type within the group. Job titles are representative examples drawn from the Georgian posting sample.

5 Discussion

The results reveal a Georgian labor market in which **Role Expansion** is the dominant mode of GenAI integration, accounting for more than half of all applicable postings. This pattern is visible across every occupational major group from Managers to Professionals and across diverse sectors including marketing agencies, law firms, construction companies, event management, education providers and media firms, confirming that the additive pattern is economy-wide rather than sector-specific. Even within the most technically advanced subsector, Custom Computer Programming (NACE J62.01), role expansion outpaced all other transformation types. The most immediate workforce development priority is therefore AI tool fluency at scale, distributed across non-technical degree programs and vocational training rather than concentrated in engineering alone.

New Role Creation accounts for just over a fifth of applicable postings and is concentrated primarily among Software and Applications Developers (ISCO 2519) and Other IT and Computer Services firms (NACE J62.09), where positions such as Senior AI Engineers, GenAI Ops Engineers and AI Solution Architects represent genuinely new professional identities. A notable share of Technical AI Consultant roles appears in management consultancy (NACE M70.22), serving enterprise clients across sectors. This pattern reflects a dynamic in which internationally oriented ICT firms are generating genuinely new AI occupations while the broader Georgian market primarily absorbs GenAI into existing roles, consistent with the dual-track pattern Chen et al. (2025) document in emerging market technology sectors.

Role Enrichment is concentrated among software and applications developers and software developers, almost entirely within ICT programming and consultancy services

(NACE J62), reflecting the technical depth required for AI governance competencies in internationally oriented software firms. **Role Redesign** is the most structurally distinctive type: both identified cases are in technician-level occupations, specifically an Audio Transcriptionist and an Onboarding QA Tester where AI now performs the primary task and the human contribution has been fully redirected toward output validation. Perception-performance gap warning is particularly relevant here: workers in such roles may report confidence gains while losing the independent reasoning competencies the redesigned role nominally retains. Finally, **Role Merging** is confined to creative and media environments — two music content creation roles in artistic creation (NACE R90.03) and one AI Content Creator in advertising (NACE M73.11) confirming that cross-domain consolidation is an early-stage phenomenon where GenAI tools span text, image, audio and video production simultaneously.

6 Conclusions

This study provides the first structured empirical evidence on how generative AI is reshaping job roles in the Georgian labor market. Applying a five-type transformation typology to job postings collected from major Georgian hiring platforms, we find that **all five patterns of GenAI-induced role transformation** identified in the international literature are empirically present in Georgia, confirming that the framework captures real and observable dynamics rather than theoretical projections.

Several specific findings stand out. First, role expansion is the dominant transformation mode, concentrated in marketing, content creation, design and general software development, where AI tool requirements are being appended to existing job profiles without reconceiving occupational identity. This additive pattern is consistent across sectors and seniority levels, suggesting that Georgia's labor market is in an early but active phase of GenAI integration where augmentation precedes structural change.

The new role creation is the second most prevalent pattern and is concentrated in technology services, particularly among AI engineering and data science positions where genuinely new professional identities have emerged with no pre-AI equivalent. Role enrichment appears primarily in senior and specialist ICT positions where managing and governing AI systems has become a core competency requirement, rather than simply using AI as a productivity tool. Additionally, role redesign and role merging remain rare, but they are not absent: redesign is identifiable in testing and data annotation roles where AI has assumed the primary task and humans have shifted to output validation, while merging appears in creative and media roles where generative tools enable one worker to span domains previously requiring multiple specialists.

Several directions for future research follow from these findings. The most immediate priority is temporal replication: applying the same methodology to a new sample of Georgian job postings collected six to twelve months later would enable direct comparison and detection of whether the current dominance of role expansion is shifting toward enrichment, redesign or new role creation as employers deepen their GenAI integration. Second, combining posting analysis with employer interviews or employee surveys would allow researchers to examine whether the transformations encoded in job advertisements are materializing in actual work practices. Third, the sample's concentration in the ICT sector points to the need for a sector-diversified study targeting industries where GenAI adoption may be less visible in public postings, such as healthcare, finance, legal services and education. Finally, the Georgian findings invite comparison with other South Caucasus and post-Soviet economies, enabling the development of a region-specific account of how emerging economies absorb general-purpose AI technologies into their labor market structures.

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REFERENCES

1. Acemoglu, D. (2025). The simple macroeconomics of AI. *Economic Policy*, 40(121), 13-58.
2. Acemoglu, D., Autor, D., Hazell, J., & Restrepo, P. (2022). AI and jobs: Evidence from online vacancies. *Journal of Labor Economics*, 40(S1), S293-S340. <https://doi.org/10.1086/718327>
3. Ahmadi, M., Khosh Kheslat, N., & Akintomide, A. (2023). Generative AI impact on labor market: Analyzing ChatGPT's demand in job advertisements. arXiv preprint.
4. Bluemelhuber, B., & Langer, B. (2026). Generative AI competencies in demand: A job market analysis of knowledge, skills, and abilities. Proceedings of the 59th Hawaii International Conference on System Sciences.
5. Capraro, V., Lentsch, A., Acemoglu, D., et al. (2024). The impact of generative artificial intelligence on socioeconomic inequalities and policy making. *PNAS Nexus*, 3(6), pgae191.
6. Chen, Q., Ge, J., Xie, H., Xu, X., & Yang, Y. (2025). Large language models at work in China's labor market. *China Economic Review*, 92, 102413.
7. De Cremer, D., Morini Bianzino, N., & Falk, B. (2023). How generative AI could disrupt creative work. *Harvard Business Review*.
8. Dillon, E. W., Jaffe, S., Immorlica, N., & Stanton, C. T. (2025). Shifting work patterns with generative AI. NBER Working Paper No. 33795.
9. Eriksson, O., & Nordin, C. (2025). *AI and the evolving role of the software engineer: Evidence from Swedish job advertisements*. [Bachelor's thesis, Mid Sweden University].
10. Ganguli, S. (2025). The why and how of generative AI application in business for career readiness. *International Journal of Advanced Corporate Learning*, 18(1), 64-76.
11. Gries, T., & Naude, W. (2022). Modelling artificial intelligence in economics. *Journal for Labor Market Research*, 56, 12.
12. Gulati, P., Marchetti, A., Puranam, P., & Sevchenko, V. (2025). Generative AI adoption and higher order skills. Working Paper, INSEAD.
13. Hoffmann, M., Boysel, S., Nagle, F., Peng, S., & Xu, K. (2025). Generative AI and the nature of work. Harvard Business School Working Paper 25-021.
14. Hui, X., Reshef, O., & Zhou, L. (2023). The short-term effects of generative artificial intelligence on employment: Evidence from an online labor market. CESifo Working Paper No. 10601.
15. Nakash, M., & Peretz, O. (2025). Decoding the AI job market: mapping skills and classifying careers through online job ads. *Employee Relations: The International Journal*, 1-18.
16. Peng, S., Kalliamvakou, E., Cihon, P., & Demirer, M. (2023). The impact of AI on developer productivity: Evidence from GitHub Copilot. arXiv:2302.06590.
17. Rahouli, S. (2025). Generative artificial intelligence for enhancing problem-solving capabilities of non-technical roles. *Generative artificial intelligence for enhancing problem-solving capabilities of non-technical roles*. [Master's thesis, Kaunas University of Technology].
18. Ren, X. (2025). The impact of generative AI-driven job reshaping on creativity sustainability. *The Frontiers of Society, Science and Technology*, 7(7), 15-21.
19. Salari, N., Beiromvand, M., Hosseinian-Far, A., Habibi, J., Babajani, F., & Mohammadi, M. (2025). Impacts of generative artificial intelligence on the future of labor market: A systematic review. *Computers in Human Behavior Reports*, 18, 100652.
20. Tona, O., Leidner, D. E., van der Meulen, N., Wixom, B., Nunes, J., & Shagam, D. (2025). The deployment of AI to infer employee skills: Insights from Johnson and Johnson. *Information Systems Journal*, 35, 1516-1527.
21. Verma, A., Lamsal, K., & Verma, P. (2022). An investigation of skill requirements in artificial intelligence and machine learning job advertisements. *Industry and Higher Education*, 36(1),

- 63-73. Zysman, J., & Nitzberg, M. (2024). Generative AI and the future of work: Augmentation or automation? BRIE Working Paper 2024-2, UC Berkeley.
21. Zysman, J., & Nitzberg, M. (2024). Generative AI and the future of work: Augmentation or automation? BRIE Working Paper 2024-2, UC Berkeley.